

19. RANGE EXTENSION OF *PANGIO GOAENSIS* (CYPRINIFORMES : COBITIDAE) TO THE CHALIYAR DRAINAGE OF KERALA

(With one plate)

The elongate cobitid *Cobitis pangia* Hamilton 1822, described originally from northeastern Bengal, but later recorded also from Myanmar (Day, 1875-78), was placed in *Acanthopthalmus* (van Hasselt 1823) by Gunther (1868:370). A second species from India, was described by Tilak (1973) from a specimen 31.0 mm SL, collected from Colem river, Goa (15° 20' N, 74° 16' E). Subsequently, Menon (1992) in a revision of the Indian Cobitidae, added another species *A. longipinnis* from Kharangpat lake, Manipur, India, bringing the total number of species of *Acanthopthalmus* in India to three. Kottelat (1987), showed that the genus name *Acanthopthalmus* was a junior objective synonym and revived *Pangio* Blyth 1860, for these fishes. In India, the genus has until now been recorded only from northeast Bengal and Goa. Its presence further south in Kerala is of ichthyological significance.

Pangio goaensis (Tilak 1973)

(Figs. 1 & 2)

Acanthopthalmus goaensis Tilak (1972)*Acanthopthalmus goaensis* Menon 1992*Pangio goaensis* Menon (1993)

Diagnosis: *Pangio goaensis* is distinguished from the other species of *Pangio* known from India in having the dorsal fin origin located between the pelvic and anal fin origins, by the presence of a fringed flap on the outer side of each mental lobe, and by the presence of two longitudinal colour bands on the body (vs. dorsal fin origin above pelvic fin base in *P. longipinnis*; and no fringed flap on outer side of mental lobes or longitudinal colour bands on the body of *P. longipinnis* or *P. pangia*).

Coloration: Ground colour of body (in alcohol) yellowish; two horizontal lateral bands, one along mid-lateral extending beyond eyes and

bending to snout tip, one below dorsal running forward and meeting the band of the other side across the snout. A predorsal band which is broken down into spots before dorsal.

Pangio goaensis is so far known only from the holotype, 31.0 mm SL, from Goa. The presence of this species in the drainage of the Chaliyar river, Kerala, extends its range of distribution to the west-flowing rivers of the Southern Western Ghats. There is no significant difference in any of the biometric characters studied except the length of the fins, which are observed to be longer than those described by Tilak (1973), for the holotype; this could be due to the smaller size of our specimens. The caudal fin of our specimens is, however, rounded and not emarginate as in the holotype.

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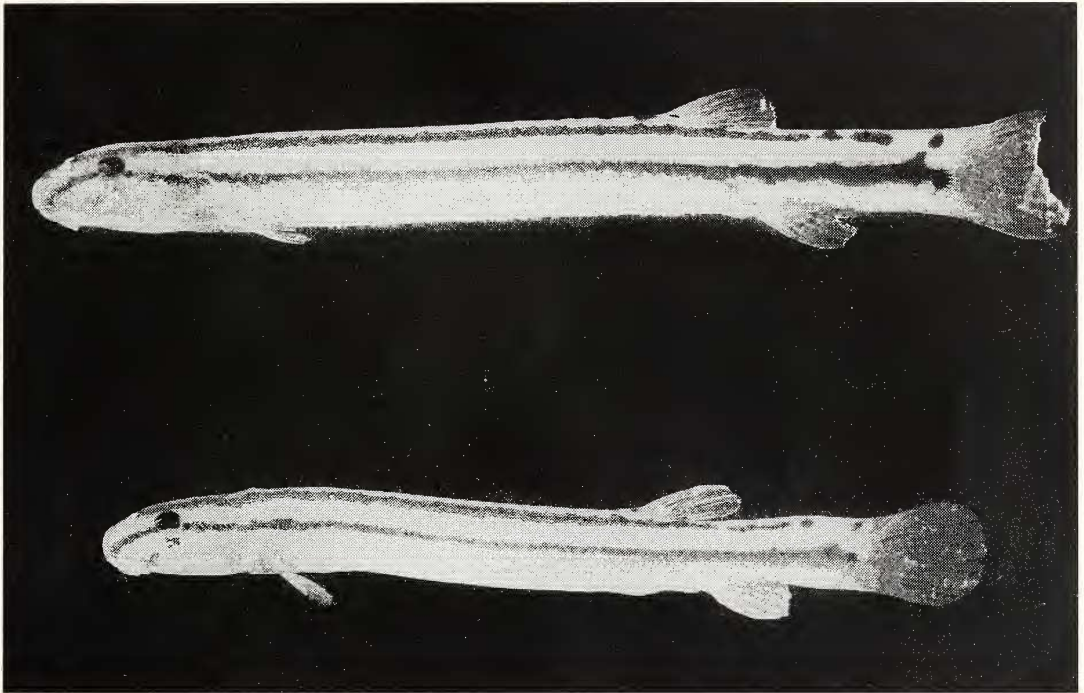


Fig.1. Lateral view of *Pangio goaensis*, 19.7 & 17.1 mm SL., F. 4493/ZSI/SRS.

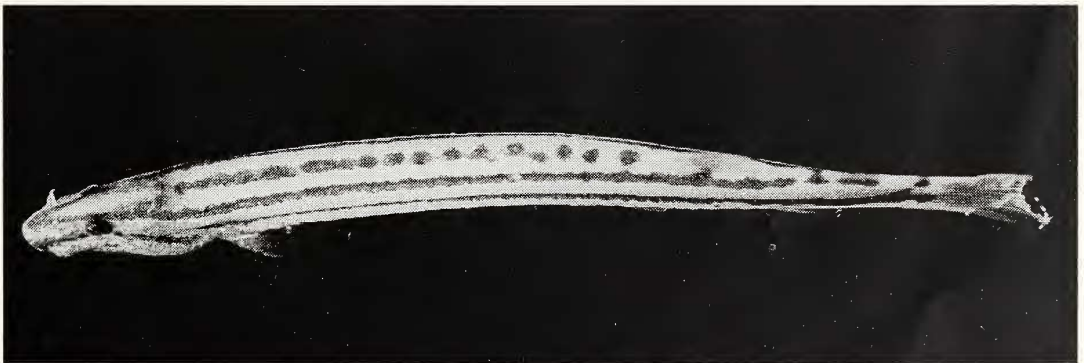


Fig.2. Dorsal view of *Pangio goaensis*, 19.7 mm SL

REFERENCES

- BLYTH, E. (1860): Report on some fishes received chiefly from the Sitang River and its tributary streams, Tenasserim Provinces. *J. Asiatic Soc. Bengal* 29(2): 138-174.
- DAY, F. (1875-78): The Fishes of India; being a natural history of the fishes known to inhabit the seas and freshwaters of India, Burma and Ceylon. Quaritch, London. Vol. 1: text. 778 pp; Vol. 2: Atlas, 198 pl.
- GUNTHER, A. (1868): Catalogue of the fishes in the British Museum, 7: Catalogue of the Physostomi containing the families Heteropygii, Cyprinidae, Gonorrhynchidae, Hyodontidae, Osteoglossidae, Clupeidae, Chirocentridae, Alepocephalidae, Notopteridae, Halosauridae. British Mus., London. xx + 512 pp.
- HAMILTON, F. (1822): An account of the fishes found in the River Ganges and its branches. Edin. & Lond. vii + 405 pp, 39 pl.
- KOTTELAT, M. (1987): Nomenclatural status of fish names created by J.C. van Hasselt (1823) and of some cobitoid genera. *Japanese J. Ichthyol.* 33 (4): 368-375.
- MENON, A.G.K. (1992): The Fauna of India and Adjacent Countries, Pisces, Vol. IV(2) Teleostei: Cobitoidea: Cobitidae, 112 pp., pls. 1-10, Zoological Survey of India.
- MENON, A.G.K. (1993): Checklist of the Freshwater Fishes of India. Dept. of Environment & Forests, Govt. of India.
- TILAK, R. (1972): A study of the freshwater and estuarine fishes of Goa. 1. *Acanthopthalmus goaensis* a new cobitid from Goa, with notes on *Zenarchopterus striga* (Blyth). *J. Inl. Fish Soc. India* 4: 61-68.
- VAN HASSELT, J.C. (1823): Uittreksel uit een' brief van Dr J.C. van Hasselt, aan den Heer C.J. Temminck. Allg. Konst-en Letter-Bode, voor het jar 1823. I. Deel, (20): 315-317.

20. FISHES OF NAMBIYAR RIVER, KALAKAD-MUNDANTHURAI TIGER RESERVE, TAMIL NADU

Kalakad-Mundanthurai Tiger Reserve (KMTR) is located at the southernmost tip of the Western Ghats. Several streams originate and drain into the major east-flowing perennial river Tamiraparani. Johnsingh and Wickram (1987) reported freshwater fishes from the Kalakad-Mundanthurai Wildlife Sanctuary with a notable exception on the Nambiyar river, a separate river basin with several tributaries in the KMTR. Documentation is needed due to the threats to the river system and fish fauna. The present survey is a study of the fish diversity in the Western Ghats streams under the Western Ghats Biodiversity Programme.

Nambiyar river is one of the east-flowing rivers in Nanguneri taluka, Tirunelveli dist., Tamil Nadu, forming a minor river basin. This river originates in the eastern slopes of the Western Ghats at 1650 m above msl in the Kalakad Reserve Forest. It is drained by two major tributaries viz., Thamarayar and Parattaiyar. The 48 km long river flows a distance

of 9.6 km in the hilly regions before it confluences with the Bay of Bengal. The river has nine anicuts/weirs (check dams) and 40 wetlands. Due to multiple impoundments along its course, it reaches the Bay of Bengal only during monsoon.

Fishes were collected from two sites, covering upstream and downstream regions in Nambiyar river, using various mesh sizes of monofilamentous gill nets, drag nets and scoop nets. The colour spots and other important characters of the catch were noted, and the specimens preserved in 10% formalin. In larger specimens, 2-5 ml formalin was injected into the abdomen.

In Nambiyar river, 14 species of 2 orders, 8 families and 13 genera were recorded (Table 1). All the species are known from the Western Ghats of South India (Talwar & Jhingran 1991), however, this is the first report on these fishes from the Nambiyar river system. Among the species caught, the air-breathing *Channa* sp. and